

UNCHARTED DEPTHS

Summary of Global Policies in 1Q09

We summarize the global policy measures of the past quarter into four key areas: the historic monetary policy, the US and Chinese fiscal stimulus, the IMF's new facilities, and the attempts to start cleaning banks' balance sheets.

At the end of 2008 we witnessed global leaders venturing into new and unprecedented types of stimulus to stem the consequences of the financial crisis that hit the global economy in 4Q08. These measures included quantitative easing by the Fed, "automatic" lending facilities to "well-behaved" large emerging markets, and less conditionality by the IMF. Many of the policies we have seen so far in 2009 have been dramatic expansions to these programs. Central banks have announced their interest in trebling their balance sheets through quantitative easing, and the G20 has commended \$1trn to the IMF's new pre-emptive approach. Partly offsetting these policy advances, however, has been the erratic start of the financial stability initiatives, which highlights the complexity of the issues involved.

In the appendix to this piece, we provide four tables that document the details on key updates to global policies around the world in this quarter, which complement those published in "Uncharted Territory: Summary of Global Policies in 2008" from December 16, 2008.

Historic Monetary Policy

Sometimes it is easy to spot history in the making and the policy action this quarter by central banks has indeed been historic. The Bank of Japan, the Bank of England, and the Fed have all expanded their direct injections of money in credit and corporate bond markets. They have also debunked one of the last standing central bank taboos – buying government bonds. The Fed has tripled its total buying program to a stunning \$1.75trn from \$600bn. This implies that the Fed is expected to underwrite half of the gross issuance in the MBS market in 2009 and close to 15% of the gross issuance in the Treasury market.

The additional purchases are expected to raise the Fed's assets to 29% of US GDP, from 7% a year ago. The operations by the BoE have been almost as aggressive, amounting to as much as £150bn of purchased assets, mainly gilts – which would be 10% of UK GDP – of which £75bn is to be purchased in the next three months. This would take the BoE's assets to 23% of GDP (Figure 1). Table 1 of the Appendix succinctly summarizes the most important initiatives taken by the G4 central banks (Fed, BoE, BoJ, and ECB). The previously described buying programs by the Fed and BoE are the most impressive while the Bank of Japan has tried to keep up by increasing government bond purchases and offering banks up to ¥1trn in subordinated loans through investment in corporate bonds. On the other hand, similar measures at the ECB are still only under discussion.

Mimi Yang
+1 212 526 5194
mimiyang@barcap.com

Christian Broda
+1 212 526 8536
christian.broda@barcap.com

The most aggressive rate cuts in 2009 have been in EM

On the interest rate policy front, while action by developed Central Banks was limited as most are already close to the zero-bound, EM Central Banks have increased the size of rate cuts significantly in 1Q09. Figure 3 shows the most aggressive changes in recent months.

Fiscal stimulus: hope rests on the US and China

The US passed a \$787bn fiscal package while Europe is more reluctant to spend

The big story on the fiscal side during the 1Q09 was the passage of President Obama’s fiscal package in the form of a \$787bn American Recovery and Reinvestment Act in February 2009. The plan includes \$288bn in tax cuts and \$111bn of infrastructure investment, which will help support consumers and jobs in the US. As a rule of thumb, tax cuts are typically a faster but less stimulative way of boosting aggregate demand than infrastructure spending. Japan, who saw its GDP fall -12.1% (saar) in 4Q10, announced a record stimulus package in April of about \$150bn and almost 3% of GDP. Several other countries including Germany, Canada, and Australia also announced additional but more modest measures in 2009. For an updated list with details on global fiscal stimulus around the world please see Table 2 of the Appendix. The US and China (\$586bn in 4Q08) dominate the list while elsewhere fiscal impulse has been much smaller in comparison, especially in Europe where about two-thirds is in the form of automatic stabilizers (changes in spending that occur naturally with the business cycle). The reluctance of Germany and France to increase fiscal discretionary spending partly stems from the sharp increases in public debt/GDP ratios around the world (Figure 2).

Assistance for the auto sector helped global auto sales improve in recent months

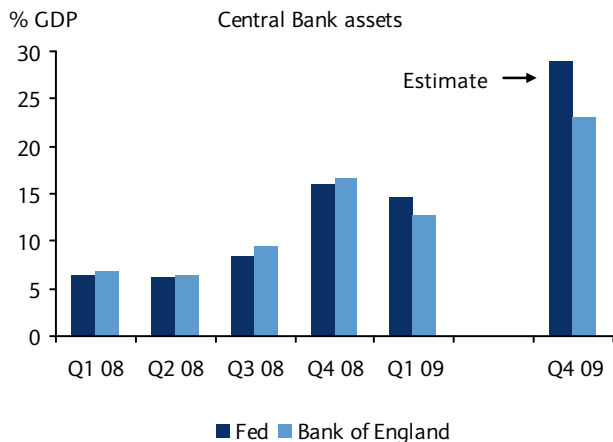
The help provided by governments for the battered auto sectors have also been commonplace in 1Q around the world, especially in Europe. Countries such as Italy, Germany, and Spain have created incentives to purchase or trade-in cars, while other countries such as the US, UK, and France have increased loans and guarantees for automakers. These measures have helped global auto sales improve from their January lows.

EM countries are being helped by additional IMF resources and increased trade credit

IMF redux: To the rescue of emerging markets

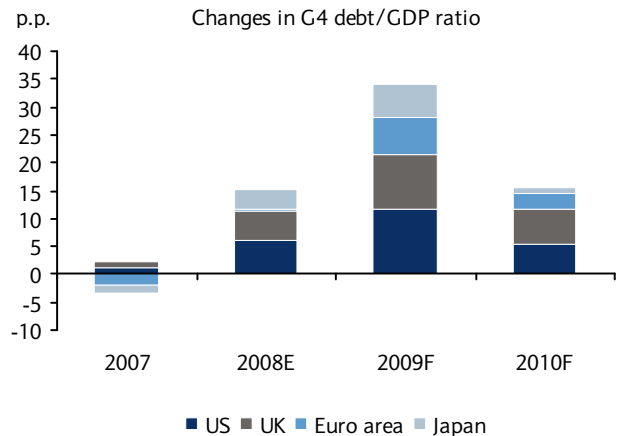
Emerging markets were hit hard as commodity prices fell and exports dropped sharply worldwide, and Eastern Europe found out just how vulnerable they were. In February the combined forces of the World Bank, the European Bank for Reconstruction, and Development and the European Investment Bank, pledged €25bn in loans for Eastern Europe. This amount was doubled to €50bn in March. The IMF has also provided support to

Figure 1: Expanding balance sheets of the Fed and BoE



Source: Barclays Capital, Haver Analytics

Figure 2: Rising debt in G4 economies



Source: Barclays Capital, DataStream

the region. Among the largest recipients of aid are Romania with \$27bn (\$16bn from IMF), Hungary with \$25bn (IMF \$16bn), and Latvia with \$10bn (IMF \$2bn). Fortunately, ensuring EM countries survive the financial crisis was also a priority during the G20 meeting in April 2009 where world leaders decided to place responsibility of rescuing EM in the hands of a revamped IMF. IMF resources were tripled to \$750bn and an issuance of \$250bn in Special Drawing Rights (IMF currency) was authorized. The G20 also announced a \$250bn package to support trade, although only \$50bn of this is new money.

IMF borrowing is set to increase in 2009, Mexico has already lined up for \$47bn

Overall these developments were welcomed by emerging markets as they help reduce liquidity premiums and contagion risks. The significant increase in funding allows the IMF to increase its lending capacity and also relax its strict borrowing conditions. The IMF has already committed more than \$60bn in loans since the crisis began (see Figure 4); this is expected to increase with the new initiatives in place. For example, the new IMF Flexible Credit Line, which offers countries with strong fundamentals access to large sources of financing, is already drawing interest; Mexico recently announced it would apply for a \$47bn loan.

Financial Stability: It will be long and painful

Banks are still under stress and will require more capital

Policymakers are still keen on restoring confidence to the financial sector with an eye on helping banks through asset protection programs or direct capitalization. But as has been widely recognized, this is a complicated problem that will likely take years to resolve. Direct capital injections continued in 2009 albeit at a slower pace than 4Q08. In the US, regulators are in the process of completing “stress tests” on the nation’s top banks to determine how healthy they are; if deemed undercapitalized, banks will be forced to find additional financing sources from private investors or take state funding through the Troubled Assets Relief Program (TARP). Table 3 of the Appendix shows an updated list of programs worldwide to help the banking sector and Table 4 contains a list of financial institutions who have received state help in 2008 and 2009.

However, many banks are keen to return government money

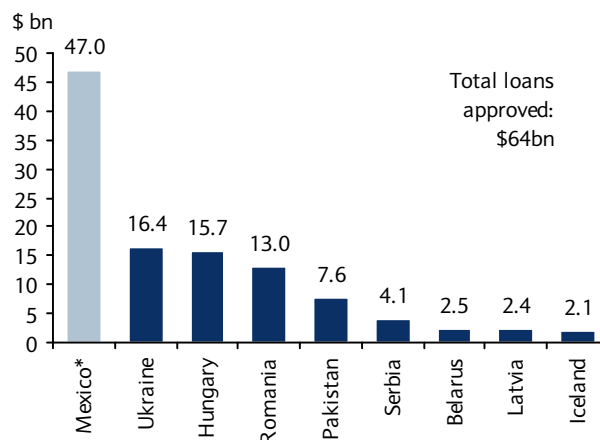
A drawback during this quarter has been that many banks in the US are planning on or hoping to return TARP money as fast as possible in order to avoid strict new conditions imposed by the government – including limits on compensation and dividend payments. Treasury Secretary Geithner estimates paybacks to be around \$25bn this year. This is alarming as a lack of TARP participation presents a setback to the initial objective, which was to increase lending, and could further delay an improvement in capital markets.

Figure 3: Most aggressive rate cuts in 2009 so far

Country	Beg 08	End 08	Current	Chg YTD
Chile	6.00	8.25	2.25	6.00
Turkey	15.75	15.00	10.50	4.50
Brazil	11.25	13.75	11.25	2.50
South Africa	11.00	11.50	9.50	2.00
N. Zealand	8.25	5.00	3.00	2.00
England	5.50	2.00	0.50	1.50
India	7.75	6.50	5.00	1.50
Mexico	7.50	8.25	6.75	1.50
Peru	5.00	6.50	5.00	1.50
Thailand	3.25	2.75	1.25	1.50
Australia	6.75	4.25	3.00	1.25
ECB	4.00	2.50	1.25	1.25
Poland	5.00	5.00	3.75	1.25
Canada	4.25	1.50	0.50	1.00
Sweden	4.00	2.00	1.00	1.00
Korea	5.00	3.00	2.00	1.00

Source: Official websites of various central banks, Barclays Capital

Figure 4: IMF lending so far



Note: Mexico loan is pending, announced in April 2009. Source: Bloomberg.

*All this increases awareness of
the need to regulate financial
markets on a global level*

Banks are also still suffering from distressed mortgage-related assets on their balance sheets. Big developments of the past few months include the revamped assistance packages in the UK and the US. The UK Asset Protection Scheme will insure up to £585bn of bank assets and the Public Private Investment Program (PPIP) will buy \$500bn to \$1trn of legacy securities and loans. Another piece of welcomed news for US banks is the announcement that FASB, the accounting standards regulator in the US, has relaxed the controversial mark-to-market accounting rules. The reaction to FASB actions has been especially cool from Europe, where there are concerns that this creates an unfair advantage for American banks. This will add to existing pressures that there needs to be an international standard when it comes to financial regulation.

APPENDIX: SUMMARIES OF GLOBAL POLICIES

Figure 4: G4 Central Bank Initiatives

	Fed	BOE	BOJ	ECB
Policy Rate	0.00-0.25%	0.50%	0.10%	1.25%
Assets: 1Q08	7% GDP	7% GDP	23% GDP	15% GDP
Assets: 1Q09	14% GDP	13% GDP	25% GDP	20% GDP
Assets: 4Q09 (estimate)	29% GDP	23% GDP	28% GDP	-
Asset Swaps	Term Securities Lending Facility (TSLF): Allow swaps of Treasuries for investment grade MBS.	Special Liquidity Scheme: Banks can swap high quality MBS for UK Treasury bills. Duration is 1 year but can be extended to 3 years.	-	Facility to exchange collateral ineligible at ECB for eligible collateral by CBs in Italy (€40bn), Spain (€50bn)
Liquidity programs	Term Auction Facility (TAF): Loans of 28 and 84 days made against discount window collateral. Term Asset Backed Securities Loan Facility (TALF): \$200bn in loans to owners of credit card, auto and student loan backed ABS. Primary Dealer Credit Facility (PDCF): overnight collateralized loans for primary dealers. Asset-backed CP Money Market Mutual Fund Facility (MMIFF): loans for banks to purchase ABCP.	Discount Window Facility: introduced in Oct 08. Banks can borrow of government securities for up to 30 days. Additional longer-term repos operations: operations were extended indefinitely since Oct 2008.	Corporate debt financing facility: unlimited funds will be supplied at the target overnight call rate with corporate debt accepted as collateral.	Main and supplementary longer-term refinancing operations (up to 6 months) were expanded and will be carried through at full allotment.
Collateral Expansion	Collateral expanded several times for various programs	Collateral expanded for repos and include MBS, AAA- corporate and consumer ABS, and highly rated ABCP.	Collateral expanded in Dec 08. New minimum rating lowered to BBB from A.	Expanded, includes CDs and securities in USD, JPY and GBP. Min. rating lowered to BBB- from A-.
Private asset purchases	Money Market Investor Funding Facility (MMIFF): Fed to purchase asset-backed commercial paper from mutual funds through SPVs. Commercial Paper Funding Facility (CPFF): Fed to buy unsecured asset-backed CP from issuers. \$241bn to date. GSE purchase: The Fed announced (Mar 2009) expansion to purchase agency MBS to \$1.25trn by year-end. Originally, direct purchases of MBS was \$500bn and agency debt was \$100bn.	Asset Purchase Facility (APF): Can buy up to £50bn of assets from banks funded by bank reserves. The total amount authorized for the APF is £75bn. (announced Jan 2009)	Corporate bond purchase program: up to ¥1trn in subordinated loans to banks through purchases of corporate bonds (rated A or higher, maturity less than 1 yr) Outright Purchases of CP: up to ¥3trn of CP by Mar 2009 (rated a-1 or higher, maturity less than 3 months)	Purchases of CP under discussion at ECB
Treasury purchases	Announced purchases of up to \$300bn in Treasuries	Asset Purchase Facility (APF): buying GILTS (£19bn so far). £75bn in purchases authorized (£50bn of which are for private assets).	Increased purchases of Japanese Government Bonds (JGBs) from banks from ¥1.4trn to ¥1.8trn a month. (Annc'd Jan '09)	-
FX Swaps	Swap lines opened with other Central Banks, including several with emerging market economies.	Unlimited dollar supply offered on a weekly basis. Swap lines with the Fed to increase accordingly.	Unlimited dollar supply offered on a weekly basis. Swap lines with the Fed to increase accordingly.	Unlimited dollar supply offered on a weekly basis. Swap lines with the Fed to increase accordingly.
Other	Loans for AIG of \$123bn and set up Maiden Lane LLC in Mar 08 to acquire assets of Bear Stearns to collateralize a \$30bn loan to JP Morgan.	-	The Complementary Deposit Facility will pay interest on excess reserves until Apr 2009	-

Source: News outlets, Barclays Capital

Figure 5: Global Fiscal Stimulus

Country	\$ bn	% GDP	Details	Ann'd
Japan	\$150	3.0	- Expected to announce a record fiscal stimulus worth \$150bn, a post-war record - Includes ¥4.9trn to support labor and financial markets, including potential intervention in domestic stocks - Includes ¥6.2trn to boost competitiveness and ¥4.3trn for local governments to improve regional economies.	Apr 09
United States	\$787	5.5	- The American Recovery and Reinvestment Act was passed in Feb 2009 - Includes \$288bn in tax cuts that will benefit those with incomes below \$200,000 - \$144bn for state and local government funding and \$111bn on infrastructure and science-related projects	Feb 09
Italy	\$2.5	0.1	- €2bn of additional fiscal stimulus announced in 2009 (on top of €80bn package from 2008) - Includes incentives to buy new cars and home appliances to help manufacturers	Feb 09
Australia	\$27	3.9	- A\$ 42bn package announced by the Australian government (on top of A\$7.3bn package from Oct 2008) - A\$12.7bn in cash grants to low income families and A\$29bn on infrastructure	Feb 09
Germany	\$66	2.0	- Agrees on a second fiscal stimulus for 2009-10 worth €50bn in Feb 09 (on top of €32bn package from 08) - About €17bn on infrastructure investment and about €18bn in cuts on income tax and healthcare insurance	Jan 09
Canada	\$33	2.4	- Announced a fiscal package of C\$12 billion for the next 2 years - Infrastructure spending and reductions in the personal income tax are included. - There will also be C\$7.8 billion of funds used to improve the housing market	Jan 09
Singapore	\$14	7.4	- Unveiled a \$13.6bn fiscal stimulus to ease the recession and unemployment rate - There will be infrastructure spending, corporate tax relief, and subsidized wages - A 20% income tax rebate of up to \$2000 per worker will also apply	Jan 09
Indonesia	\$6.5	1.5	- Announced a \$6.5bn fiscal spending package to battle the economic downturn - Spending will be focused on infrastructure and other job-creating projects.	Jan 09
Norway	\$3	0.9	- Will tap into oil revenues from its sovereign wealth fund to stimulate growth and employment - 17bn crowns will be in infrastructure spending and 3bn crowns will be in tax relief.	Jan 09
India	\$60	5.0	- Announced an increase of \$4bn in fiscal spending in Dec 2008 (brings total stimulus to around \$60bn) - The stimulus includes spending in infrastructure and industries such as housing, textiles and exports	Dec 08
France	\$33	1.4	- Announced a €26bn fiscal package - There will be increased investment in transportation and energy infrastructure. - About €11.4bn will come from early repayment of tax credits and rebates.	Dec 08
China	\$586	14.0	- The announced package is \$586bn (4 trn yuan) but expected stimulus for 2009-2010 is \$284bn - About 45% of the stimulus will be for infrastructure such as railways, roads, airports, etc. - Another 25% will be used in post-earthquake construction	Nov 08
Italy	\$102	5.7	- Three-year €80bn fiscal stimulus announced in November 2008 - There will be one-off payments to families and limits on bank mortgage rates for households	Nov 08
Russia	\$64	5.4	- Tax cuts are \$24-30bn, direct industry support is \$4.4bn and \$13.5bn for subordinated loans to banks	Nov 08
Germany	\$41	1.1	- A €32bn two-year economic "growth package" announced in Nov 2008 - It will include infrastructure spending and support programs for small and medium-sized companies.	Nov 08
UK	\$30	1.0	- The UK announced a fiscal stimulus that will include £20bn of government spending. - Includes a significant 2.5 pp reduction of the main VAT rate from 17.5% to 15.0% until the end of 2009	Nov 08
South Korea	\$9	1.0	- Announced a fiscal package that will be a combination of new government spending and tax cuts - There will be spending on infrastructure projects and a 3trn won tax break on factory investment.	Nov 08
Netherlands	\$8	1.0	- Announced €6 bn fiscal package and includes measures to improve corporate liquidity - Will also include temporary subsidies for company payrolls and a speeding up of infrastructure spending	Nov 08
Hungary	\$7	3.9	- Proposed a stimulus that will be implemented over the next two years - Spending will include providing loan guarantees, subsidizing interest rates and investment projects.	Nov 08
Chile	\$2	1.2	- Announced a \$1.15bn package aimed at expanding credit for businesses - There will also be efforts to boost home sales and \$850mn of support for small/medium-sized companies	Nov 08
Malaysia	\$2	0.9	- Announced a fiscal package to boost domestic demand and support economic growth.	Nov 08
Japan	\$111	2.0	- Announced a series of fiscal stimuli in 2008 including a \$51bn package in October - There will be \$12bn in tax breaks and \$55bn in new spending including \$22bn in direct transfers	Various
Spain	\$90	6.5	- Series of measures announced in 2008 which total around €70bn including an additional €11bn in Oct - Includes infrastructure spending, tax cuts and a €400 rebate to all workers and pensioners - There will also be construction projects and aid for the auto industry to help support Spanish jobs	Various
Australia	\$7	1.0	- Australia announced a fiscal package to increase consumption and investment in the economy in Oct 08 - Included are \$4.8bn in lump-sum payments to the elderly and \$3.9bn for families - Also \$1.5bn of aid for first-time home buyers	Oct 08
United States	\$152	1.0	- The Economic Stimulus Act of 2008 was passed in Feb 2008; tax rebates for about 130 million Americans - \$600 paid to individuals with incomes below \$75K. \$1,200 to married taxpayers with incomes below \$150K	Feb 08

Source: News outlets, Barclays Capital

Figure 6: Global Banking Sector Rescues

Country	Bank Guarantees	Government Capital Injections	Bank Asset Protection	Deposit insurance
US	\$249bn issued so far under the FDIC Temporary Liquidity Guarantee Program. Guarantees newly-issued senior unsecured debt.	\$200bn of the \$700bn Troubled Asset Relief Program (TARP) allocated for capital injections. \$188bn spent so far.	Private-Public Investment Program (PPIP) to use \$75-100bn of TARP to buy \$500bn-1trn of loans and securities. (Mar '09)	Raised to \$250,000 from \$100,000
UK	Up to £250bn under the Credit Guarantee Scheme. Includes CDs, CP, and senior unsecured bonds.	Treasury made £50bn available for bank capital injections as part of a bailout package announced in Oct 2008. So far. £37bn for RBS and Lloyds	The Asset Protection Scheme insures £585bn of assets (90% of losses past "1st loss" amt) (Mar 2009)	Raised to £50,000 from £35,000
Germany	Up to €360bn from the Financial Markets Stabilization Fund (SoFFin). Another €100bn announced in 2009.	€80bn made available for capital injections as part of a bailout package announced in Oct 2008.	Considering a plan to remove toxic assets from bank balance sheets (Mar 2009)	Raised to unlimited from €20,000
Ireland	€400bn to be used to guarantee liabilities of the six largest banks for two years	€7bn total so far (Allied Irish Bank €3.5bn, Bank of Ireland €3.5bn in return for preferred shares).	Bad bank to be funded with €80-90bn to buy toxic assets in return for Government Bonds. (Apr 2009)	Raised to unlimited from €20,000
France	€360bn in guarantees on eligible bank debt issued before Dec 31, 2009 with maturities up to 5 yrs.	€40bn fund set up to make capital injections into banks. €21bn offered to the country's top 6 banks.	-	€ 70,000
Spain	€200bn to guarantee new senior unsecured debt with maturities of up to 5 years.	Considering a fund to provide capital for savings banks through pref. stock purchases.	Up to €50bn for a fund to buy bank assets.	Raised to €100,000 from €20,000
Italy	Guarantee on new liabilities issued by banks until Dec '09	Announced up to \$15.3bn in purchases of convertible bonds to help capitalize banks. (Mar 2009)	Treasury to swap €10bn of government bonds for lower-quality bank assets	€103,000
Belgium	Up to €240bn in guarantees; includes new financing for Dexia.	€11.2bn for Fortis. €3.5bn for KBC	-	Raised to €100,000 from €20,000
Netherlands	€200bn on senior unsecured debt with maturities up to 3 yrs	€20bn fund available. (So far ING AEGON & SNS have participated)	-	Raised to €100,000 from €38,000
Sweden	Loan guarantee scheme covers SEK 1.5trn (\$183bn) of new bank debt issued by Oct 2009.	Up to SEK 50bn (\$6bn) of capital injections financed by a "stability fund" created by the government	-	Raised to SEK 500,000 from SEK 250,000
Canada	C\$218bn (\$173bn) under the Canadian Lenders Assurance Facility.	-	Will buy up to C\$125bn of MBS and purchase debt backed by car leases	C\$100,000
South Korea	\$100bn of guarantees on foreign-currency borrowings of banks	KRW20trn (around \$13.5bn) fund to buy preferred equity and subordinated debt (injections began in Mar '09)	\$27bn fund for state-run Korea Asset Mgmt Corp to buy loans and other assets from banks	KRW50mn
Austria	Up to €75bn on bank debt issued before Jun 30, 2009	€15bn through the Financial Market Stability Act	-	Raised to unlimited from €20,000
Norway	NOK 350bn (\$50bn) bank rescue and loan guarantee package	State Finance Fund of NOK 50bn (\$7bn) set up in Feb 09	-	NOK 2mn insured (about \$300,000)
Finland	€50bn in guarantees until Dec 09	-	-	Raised to unlimited from €20,000
Portugal	Up to €20bn of new debt guarantee	Up to €4bn available	-	Raised to €100,000 from €25,000
Greece	Up to €15bn for guarantees on new bank debt	€5bn for bank recapitalization	-	Raised to €50,000 from €20,000
Denmark	Guarantee on all senior debt. Supported by a \$6.5bn fund that Danish banks will contribute to.	A "sufficient" amount of aid for banks in the form of hybrid capital under The Credit Act	-	Raised to unlimited from 300,000 crowns
Australia/ N. Zealand	Guarantee on bank wholesale funding. Unspecified amount.	-	-	Raised to unlimited
UAE	Guarantee on all interbank lending for 3 years	Abu Dhabi provides Dh 16bn (\$4.4bn) for region's 5 biggest banks	-	Raised to unlimited
Switzerland	-	6bn Swiss Francs (\$5.3bn) for UBS	\$60bn of risky UBS assets placed into a SNB fund	Raised to 100,000 CHF from 30,000
Slovenia	€8bn in guarantees until end of 2009	€50mn for export and development bank SID.	-	Raised to unlimited

Source: News outlets, Barclays Capital

Figure 7: Bailed out banks

UNITED STATES

Institution	Country	Assets	Details	Date
US financial institutions	US	...	In Oct 2009, the Treasury announced the Capital Purchase Program, which committed \$250bn from TARP. Initially \$125bn was provided to 9 major banks including Citigroup, Goldman Sachs, Wells Fargo, JPMorgan Chase, Bank of America, Merrill Lynch, Morgan Stanley, State Street, and Bank of New York Mellon Corp. In April 2009, the Treasury said some life insurance companies could also qualify.	Various since Oct 08
AIG	US	\$1050bn	Total aid for AIG estimated at around \$182.5bn. This includes \$60bn in loans (reduced from the \$85bn announced in Sep 08), \$70bn in capital injections, and more than \$50bn to purchase mortgage-related assets from AIG.	Various since Sep 08
Citigroup	US	\$1938bn	About \$45bn worth of preferred stock invested in Citigroup. In Feb 2009, the government announced that it would convert \$25bn in preferred shares into common equity, raising the stake in Citigroup from 7% to 36%. There is also an agreement to cover up to \$5bn of losses.	Various since Sep 08
Bank of America	US	\$1831bn	Initially given a \$25bn capital injection as part of TARP. Later another \$138bn package was granted to support BoA's acquisition of Merrill Lynch, which includes \$20bn of capital injections and \$118bn to guarantee assets.	Various since Sep 08
Wachovia Corp.	US	\$812bn	Sold to Wells Fargo in a \$15.4bn deal that did not require government assistance.	Oct 08
Washington Mutual Inc.	US	\$310bn	Filed for Chapter 11 bankruptcy. The FDIC took over and sold the business to JPMorgan Chase Bank for \$1.9bn.	Sep 08
Goldman Sachs	US	\$1088bn	Became a bank holding company.	Sep 08
Morgan Stanley	US	\$1031bn	Became a bank holding company.	Sep 08
Lehman Brothers	US	\$639bn	Filed for Chapter 11 bankruptcy. Barclays Capital bought North American assets of Lehman for \$1.75bn.	Sep 08
Merrill Lynch	US	\$96bn	Acquired by Bank of America for \$50bn.	Sep 08
Fannie Mae	US	\$886bn	Placed under conservatorship of the Federal Housing Finance Agency. The government will receive \$1bn in senior preferred stock for a 79.9% equity stake. Up to \$200bn in funds will also be made available to support both Fannie and Freddie Mac	Sep 08
Freddie Mac	US	\$879bn	Received the same bailout as Fannie Mae.	Sep 08
IndyMac Bank	US	\$32bn	Became bankrupt and was taken over by the FDIC after a run on the bank by depositors when concerns about the bank's exposure to Alt-A mortgage loans intensified.	Jul 08
Bear Stearns	US	\$395bn	Sold to JP Morgan Chase in a government-backed deal for \$2 per share after suffering deep losses from the mortgage market. The Federal Reserve also stepped in with a \$30bn line of credit to facilitate the sale and will collateralize the loan with Bear Stearns assets.	Mar 08
Countrywide	US	\$199bn	Bank of America announced plans to buy Countrywide for \$4bn; the purchase was completed on July 1, 2008.	Jan 08

EUROPE

Institution	Country	Assets	Details	Date
Hypo Real Estate	Germany	€395bn	In Oct 2008 received a €50bn loan from the government and a consortium of private banks and insurance companies. Total loans and guarantees received by Hypo Real Estate since then have increased to €100bn. The government is also still considering nationalization.	Various
Caja Castilla La Mancha	Spain	...	Launched a €9bn rescue for the savings bank in the first bailout of a financial institution in Spain since the credit crisis began.	Mar 09
Banco Popolare	Italy	€121bn	Announced it will ask for €1.5bn from the government in return for convertible bonds. Banco Popolare is the first Italian bank to participate in the government's €16.6bn capitalization program.	Mar 09
Allied Irish Banks	Ireland	€ 259bn	The Irish government proceeded with plans to capitalize Allied Irish Banks with €3.5bn following the nationalization of Anglo Irish Bank. Approved in Mar 2009.	Mar 09
Bank of Ireland	Ireland	€ 197bn	In a deal that mirrors the package received by Allied Irish Bank, the Irish government proceeded with plans to recapitalize Bank of Ireland with €2.5bn. Approved in Mar 2009.	Mar 09
Lloyds Banking Group	UK	£436bn	Formed by the acquisition of HBOS by Lloyds TSB. In Mar 2009 became partially nationalized when the government announced it would increase its stake from 43% to 65%. Up to £260bn of assets will also be insured through the Asset Protection Scheme.	Mar 09
Royal Bank of Scotland	UK	£1949bn	In Jan 2009, the government announced that preferred shares it owned in RBS would be swapped for ordinary stock, raising government stake to 70% and effectively nationalizing RBS. In Oct 2008, RBS received \$20bn.	Feb 09
Ethias Group	Belgium	...	Approved a €1.5bn capital injection for insurance and banking group Ethias. Much of the losses suffered by Ethias resulted from its investment in bailed-out bank Dexia.	Feb 09

UNITED STATES

Institution	Country	Assets	Details	Date
Aareal Bank	Germany	€41bn	Announced it will receive €525mn from the state rescue fund SoFFin.	Feb 09
Anglo Irish Bank	Ireland	€100bn	The third largest bank in the country was nationalized; this reverses a previous plan to inject €1.5bn into Anglo Irish Bank. Many major Irish banks have seen credit downgrades.	Jan 09
Commerzbank	Germany	€615bn	Will receive a new injection of €10bn from the German financial stabilization fund SoFFin. The government will take control of 25% of the bank after the transaction.	Jan 09
KBC Group	Belgium	€377bn	KBC, Belgium's biggest bank by market value, will receive € 3.5bn (\$4.bn) in cash from the government.	Oct 08
ING Groep NV	Netherlands	€1,370 n	Received a €10bn lifeline and will sell non-voting preferred securities to the government in return.	Oct 08
UBS	Switzerland	Francs 2,078bn	Received a capital injection from the Bank of Switzerland worth 6bn Swiss francs, or \$5.2bn, in return for a 0.3% stake. UBS can also put as much as \$60bn of risky assets into a fund backed by the Swiss National Bank.	Oct 08
Kaupthing Bank	Iceland	Krona 6,604bn	Iceland nationalized the biggest bank in the country. Now the government of Iceland controls the three largest banks in the country.	Oct 08
Landsbanki	Iceland	Krona 3,970bn	The Icelandic Financial Supervisory Authority nationalized the second largest bank in the country.	Oct 08
Dexia	Belgium, France, Lux.	€614bn	Bailed out by Belgium, France, and Luxembourg with a €6.4bn (\$9.1bn) capital injection.	Sep 08
Bradford & Bingley	UK	£52bn	Nationalized by the British government, which took over its £50bn mortgage portfolio. Retail deposits and branch networks were sold to Banco Santander for £ 612mn.	Sep 08
Glitnir	Iceland	Krona 3,863bn	The government took over 75% of the company in exchange for \$865mn (€600mn). Troubles began when depositors fled from the country's third largest bank.	Sep 08
Fortis	Benelux	€974bn	Fortis was partially nationalized by Belgium, Netherlands, and Luxembourg, which received a 49% stake in return for €11.2bn (\$16.bn). In Oct 2008, the Netherlands fully nationalized the Dutch portion of Fortis.	Sep 08
Ebh Bank	Denmark	Krone 10bn	Received an unknown amount of much-needed liquidity from the central bank of Denmark and other banks. Worries arose when the lender posted larger-than-expected losses on property loans.	Sep 08
HBOS	UK	£681bn	Announced takeover of HBOS by Lloyds for £12bn in a government-backed deal. The merger will result in a banking giant that will hold close to one-third of the savings and mortgage market.	Sep 08
Roskilde Bank	Denmark	Krone 37bn	Received Krone750mn from the government and a consortium of lenders in July. After failing to secure buyers, the government bought the bank for krone 37bn (\$7.43bn).	Jul 08
Northern Rock	UK	£113.5bn	Received a deposit guarantee and a £25bn loan from the Bank of England in Sep 2007. In Feb 2008, England passed legislation (the Banking Special Provisions Act) that gave the government the power to fully nationalize.	Sep 07
Sachsen LB	Germany	...		Aug 07
IKB Deutsche Industriebank	Germany	€50bn	A consortium led by state-owned bank KfW provided a €8.1bn rescue package for IKB. Banks that contributed to the fund include Deutsche Bank and Commerzbank. IKB received an additional €3.5bn in Aug 2007 and €1.5bn in Feb 2008.	Jul 07

OTHER

Institution	Country	Assets	Details	Date
Various Korean banks	Korea	South Korea started making capital injections in Mar 2009 for 4.3trn won (\$3bn) into five local banks. The money comes from Korea's 40trn won bank capitalization fund.	Mar 09
Abu Dhabi banks	UAE	...	Abu Dhabi will inject up to around \$4.4bn into 5 of the emirate's largest banks in the form of Tier one capital. Recipients include Abu Dhabi Commercial Bank, Abu Dhabi Islamic Bank, First Gulf Bank, National Bank of Abu Dhabi and Union National Bank.	Feb 09
Saudi Credit Bank	Saudi Arabia	...	The Saudi Arabian government will inject 10bn riyals (\$2.67bn) into the government-run Saudi Credit Bank to provide no-fee loans to low-income citizens.	Oct 08
Gulf Bank	Kuwait	...	Kuwait's second biggest bank by asset size received a guarantee for all its deposits from the central bank. Many customers had started to withdraw deposits in the first signs of a bank run in the Persian Gulf.	Oct 08
Agricultural Bank of China	China	...	Received \$20bn from the country's sovereign wealth fund China Investment Corp. as part of a restructuring deal that will see it become a shareholders' company.	Oct 08

Source: News sources, Barclays Capital

Analyst Certification(s)

We, Christian Broda and Mimi Yang, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures

On September 20, 2008, Barclays Capital Inc. acquired Lehman Brothers' North American investment banking, capital markets, and private investment management businesses.

Historical and current disclosure information is provided via the two sources listed below.

<https://ecommerce.barcap.com/research/cgi-bin/all/disclosuresSearch.pl> or call 1-212-526-1072;

<http://www.lehman.com/USFIdisclosures/>

Clients can access Barclays Capital research produced after the acquisition date either through Barclays Capital's research website or through LehmanLive. Barclays Capital does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Barclays Capital may have a conflict of interest that could affect the objectivity of this report. Any reference to Barclays Capital includes its affiliates.

Barclays Capital and/or an affiliate thereof (the "firm") regularly trades, generally deals as principal and generally provides liquidity (as market maker or otherwise) in the debt securities that are the subject of this research report (and related derivatives thereof). The firm's proprietary trading accounts may have either a long and / or short position in such securities and / or derivative instruments, which may pose a conflict with the interests of investing customers. Where permitted and subject to appropriate information barrier restrictions, the firm's fixed income research analysts regularly interact with its trading desk personnel to determine current prices of fixed income securities. The firm's fixed income research analyst(s) receive compensation based on various factors including, but not limited to, the quality of their work, the overall performance of the firm (including the profitability of the investment banking department), the profitability and revenues of the Fixed Income Division and the outstanding principal amount and trading value of, the profitability of, and the potential interest of the firms investing clients in research with respect to, the asset class covered by the analyst. To the extent that any historical pricing information was obtained from Barclays Capital trading desks, the firm makes no representation that it is accurate or complete. All levels, prices and spreads are historical and do not represent current market levels, prices or spreads, some or all of which may have changed since the publication of this document. Barclays Capital produces a variety of different types of fixed income research, including fundamental credit analysis, quantitative credit analysis and trade ideas. Recommendations contained in one type of research may differ from recommendations contained in other types, whether as a result of differing time horizons, methodologies, or otherwise.

This publication has been prepared by Barclays Capital, the investment banking division of Barclays Bank PLC, and/or one or more of its affiliates as provided below. This publication is provided to you for information purposes only. Prices shown in this publication are indicative and Barclays Capital is not offering to buy or sell or soliciting offers to buy or sell any financial instrument. Other than disclosures relating to Barclays Capital, the information contained in this publication has been obtained from sources that Barclays Capital believes to be reliable, but Barclays Capital does not represent or warrant that it is accurate or complete. The views in this publication are those of Barclays Capital and are subject to change, and Barclays Capital has no obligation to update its opinions or the information in this publication. Barclays Capital and its affiliates and their respective officers, directors, partners and employees, including persons involved in the preparation or issuance of this document, may from time to time act as manager, co-manager or underwriter of a public offering or otherwise, in the capacity of principal or agent, deal in, hold or act as market-makers or advisors, brokers or commercial and/or investment bankers in relation to the securities or related derivatives which are the subject of this publication.

The analyst recommendations in this report reflect solely and exclusively those of the author(s), and such opinions were prepared independently of any other interests, including those of Barclays Capital and/or its affiliates.

Neither Barclays Capital, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this publication or its contents. The securities discussed in this publication may not be suitable for all investors. Barclays Capital recommends that investors independently evaluate each issuer, security or instrument discussed in this publication and consult any independent advisors they believe necessary. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information in this publication is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results.

This communication is being made available in the UK and Europe to persons who are investment professionals as that term is defined in Article 19 of the Financial Services and Markets Act 2000 (Financial Promotion Order) 2005. It is directed at, and therefore should only be relied upon by, persons who have professional experience in matters relating to investments. The investments to which it relates are available only to such persons and will be entered into only with such persons. Barclays Capital is authorized and regulated by the Financial Services Authority ('FSA') and member of the London Stock Exchange.

Barclays Capital Inc., US registered broker/dealer and member of FINRA (www.finra.org), is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Subject to the conditions of this publication as set out above, ABSA CAPITAL, the Investment Banking Division of ABSA Bank Limited, an authorised financial services provider (Registration No.: 1986/004794/06), is distributing this material in South Africa. Any South African person or entity wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of ABSA Capital in South Africa, ABSA TOWERS NORTH, 180 COMMISSIONER STREET, JOHANNESBURG, 2001. ABSA CAPITAL IS AN AFFILIATE OF BARCLAYS CAPITAL.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

In Japan, this report is being distributed by Barclays Capital Japan Limited to institutional investors only. Barclays Capital Japan Limited is a joint-stock company incorporated in Japan with registered office of 2-2-2, Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokucho (kinsho) No. 143. Barclays Bank PLC Frankfurt Branch is distributing this material in Germany under the supervision of Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin).

IRS Circular 230 Prepared Materials Disclaimer: Barclays Capital and its affiliates do not provide tax advice and nothing contained herein should be construed to be tax advice. Please be advised that any discussion of U.S. tax matters contained herein (including any attachments) (i) is not intended or written to be used, and cannot be used, by you for the purpose of avoiding U.S. tax-related penalties; and (ii) was written to support the promotion or marketing of the transactions or other matters addressed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

© Copyright Barclays Bank PLC (2009). All rights reserved. No part of this publication may be reproduced in any manner without the prior written permission of Barclays Capital or any of its affiliates. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place, London, E14 5HP. Additional information regarding this publication will be furnished upon request.